

Summary

NOS3 (phospho Thr494) Rabbit Polyclonal Antibody
Rabbit Polyclonal Antibody
Rabbit
ELISA,WB,
Human, Mouse, Rat

Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	NOS3
Alternative Names	NOS3; Nitric oxide synthase; endothelial; Constitutive NOS; cNOS; EC-NOS; Endothelial
	NOS; eNOS; NOS type III; NOSIII
Gene ID	4846.0
SwissProt ID	P29474.The antiserum was produced against synthesized peptide derived from human
	eNOS around the phosphorylation site of Thr494. AA range:462-511

Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:5000. Not yet tested in other applications.
Molecular Weight	130-140kD



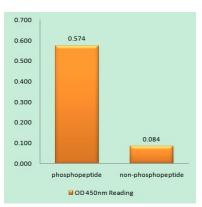
Background

Nitric oxide is a reactive free radical which acts as a biologic mediator in several processes, including neurotransmission and antimicrobial and antitumoral activities. Nitric oxide is synthesized from L-arginine by nitric oxide synthases. Variations in this gene are associated with susceptibility to coronary spasm. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2009],catalytic activity:L-arginine + n NADPH + n H(+) + m O(2) = citrulline + nitric oxide + n NADP(+).,cofactor:Binds 1 FAD.,cofactor:Binds 1 FMN.,cofactor:Heme group.,cofactor:Tetrahydrobiopterin (BH4). May stabilize the dimeric form of the enzyme,enzyme regulation:Stimulated by calcium/calmodulin. Inhibited by NOSIP and NOSTRIN.,function:Produces nitric oxide (NO) which is implicated in vascular smooth muscle relaxation through a cGMP-mediated signal transduction pathway. NO mediates vascular endothelial growth factor (VEGF)-induced angiogenesis in coronary vessels and promotes blood clotting through the activation of platelets.,online information:Nitric oxide synthase entry,polymorphism:Variation in NOS3 seem to be associated with susceptibility to coronary spasm.,similarity:Belongs to the NOS family.,similarity:Contains 1 FAD-binding FR-type domain.,similarity:Contains 1 flavodoxin-like domain.,subcellular location:Specifically associates with actin cytoskeleton in the G2 phase of the cell cycle; which is favored by interaction with NOSIP and results in a reduced enzymatic activity,subunit:Homodimer. Interacts with NOSIP and NOSTRIN.,tissue specificity:Platelets, placenta, liver and kidney.,

Research Area

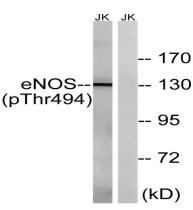
Regulates Angiogenesis; AMPK; PI3K/Akt; Protein_Acetylation

Image Data

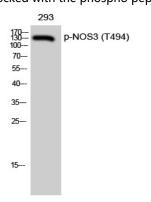


Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using eNOS (Phospho-Thr494) Antibody





Western blot analysis of lysates from Jurkat cells, using eNOS (Phospho-Thr494) Antibody. The lane on the right is blocked with the phospho peptide.



Western Blot analysis of 293 cells using Phospho-NOS3 (T494) Polyclonal Antibody diluted at 1: 1000

Note

For research use only.